

BLASTP 2.2.9 [May-01-2004]**Reference:**

Altschul, Stephen F., Thomas L. Madden, Alejandro A. Schäffer, Jinghui Zhang, Zheng Zhang, Webb Miller, and David J. Lipman (1997), "Gapped BLAST and PSI-BLAST: a new generation of protein database search programs", Nucleic Acids Res. 25:3389-3402.

RID: 1090609648-17940-165008587775.BLASTQ4

Query=

(26 letters)

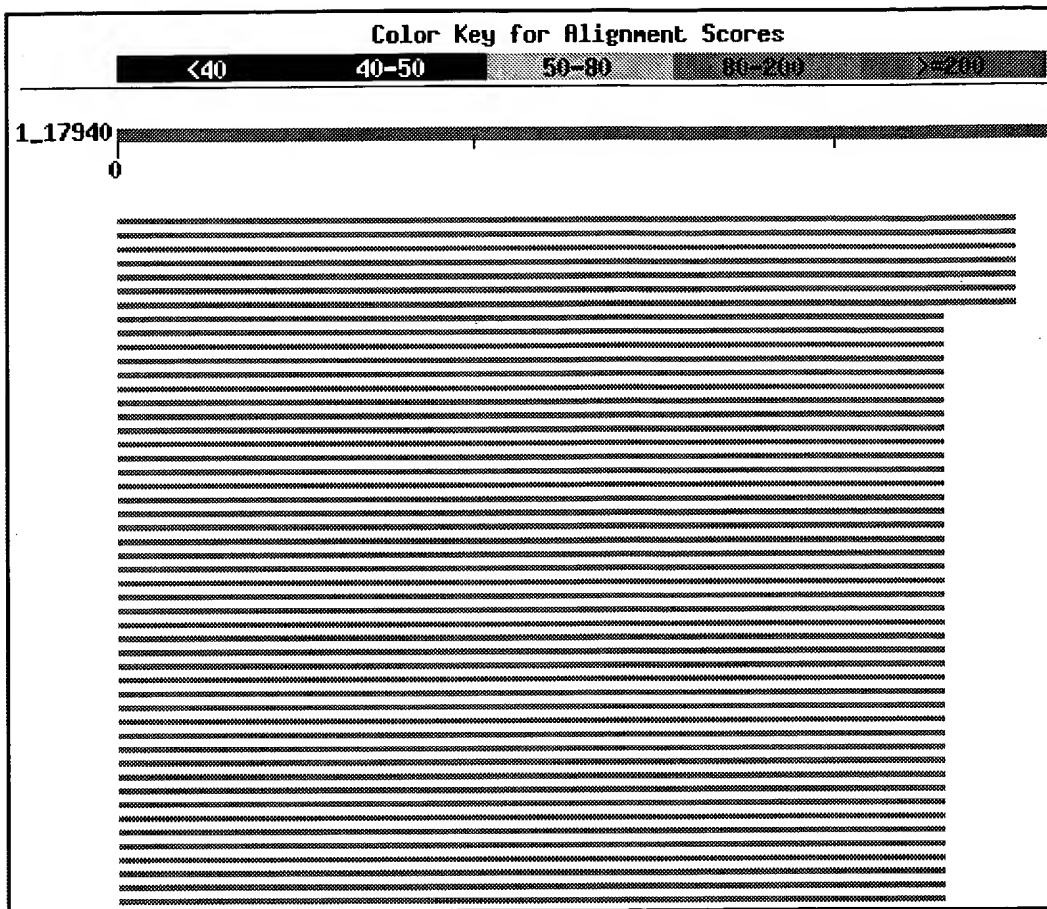
Database: All non-redundant GenBank CDS
translations+PDB+SwissProt+PIR+PRF excluding environmental samples
1,838,829 sequences; 614,976,940 total letters

If you have any problems or questions with the results of this search
please refer to the **BLAST FAQs**

Taxonomy reports

Distribution of 100 Blast Hits on the Query Sequence

Mouse-over to show defline and scores. Click to show alignments



Sequences producing significant alignments:

| | | Score (bits) | E Value |
|--|--------------------------------------|-----------------|------------|
| gi 6537688 gb AAF15686.1 | surface antigen [Hepatitis B virus] | 91 | 3e-18 |
| gi 28412176 gb AAO40321.1 | surface antigen [Hepatitis B virus] | 87 | 5e-17 |
| gi 4884874 gb AAD31851.1 | surface antigen [Hepatitis B virus] | 87 | 5e-17 |
| gi 30026416 gb AAP06615.1 | S protein [Hepatitis B virus] | 84 | 3e-16 |
| gi 1359704 emb CAA66446.1 | pre-S2 protein [Hepatitis B virus] | 84 | 4e-16 |
| gi 30026343 gb AAP06552.1 | middle S protein [Hepatitis B vi... | 84 | 4e-16 |
| gi 30983650 gb AAP40772.1 | large S protein [Hepatitis B virus] | 84 | 4e-16 |
| gi 6692573 gb AAF24741.1 | large S protein [Hepatitis B virus] | 84 | 4e-16 |
| gi 18699356 gb AAL78544.1 | surface antigen [Hepatitis B virus] | 84 | 4e-16 |
| gi 29124910 gb AAO63535.1 | envelope protein [Hepatitis B vi... | 84 | 4e-16 |
| gi 30983652 gb AAP40774.1 | S protein [Hepatitis B virus] | 84 | 4e-16 |
| gi 27261547 gb AAN85922.1 | surface antigen [Hepatitis B vir... | 84 | 4e-16 |
| gi 6692574 gb AAF24742.1 | middle S protein [Hepatitis B virus] | 84 | 4e-16 |
| gi 6692567 gb AAF24735.1 | large S protein [Hepatitis B virus] | 84 | 4e-16 |
| gi 37674548 gb AAQ96928.1 | S protein [Hepatitis B virus] | 84 | 4e-16 |
| gi 6537851 gb AAF15849.1 | surface antigen [Hepatitis B viru... | 84 | 4e-16 |
| gi 30983661 gb AAP40782.1 | middle S protein [Hepatitis B vi... | 84 | 4e-16 |
| gi 30026443 gb AAP06638.1 | large S protein [Hepatitis B virus] | 84 | 4e-16 |
| gi 19224215 gb AAL86446.1 | large S protein [Hepatitis B virus] | 84 | 4e-16 |
| gi 30026386 gb AAP06589.1 | middle S protein [Hepatitis B vi... | 84 | 4e-16 |
| gi 18699348 gb AAL78540.1 | surface antigen [Hepatitis B virus] | 84 | 4e-16 |
| gi 18699467 gb AAL78599.1 | surface antigen [Hepatitis B virus] | 84 | 4e-16 |
| gi 30983606 gb AAP40734.1 | S protein [Hepatitis B virus] | 84 | 4e-16 |

| | | | |
|---------------------------|---|----|-------|
| gi 38147025 gb AAP44480.1 | large S protein [Hepatitis B virus] | 84 | 4e-16 |
| gi 11321156 gb AAG34077.1 | carrier-surface protein [Hepatit... | 84 | 4e-16 |
| gi 32346298 gb AAO41327.1 | preS1/preS2 surface protein [Hep... | 84 | 4e-16 |
| gi 6692575 gb AAF24743.1 | S protein [Hepatitis B virus] | 84 | 4e-16 |
| gi 30983651 gb AAP40773.1 | middle S protein [Hepatitis B vi... | 84 | 4e-16 |
| gi 6537882 gb AAF15880.1 | surface antigen [Hepatitis B virus] | 84 | 4e-16 |
| gi 18699469 gb AAL78600.1 | surface antigen [Hepatitis B virus] | 84 | 4e-16 |
| gi 30026331 gb AAP06542.1 | S protein [Hepatitis B virus] | 84 | 4e-16 |
| gi 32346302 gb AAO41330.1 | preS1/preS2 surface protein [Hep... | 84 | 4e-16 |
| gi 6537691 gb AAF15689.1 | surface antigen [Hepatitis B virus] | 84 | 4e-16 |
| gi 1359703 emb CAA66445.1 | pre-S1 protein [Hepatitis B viru... | 84 | 4e-16 |
| gi 37674636 gb AAQ96972.1 | S protein [Hepatitis B virus] | 84 | 4e-16 |
| gi 37674638 gb AAQ96973.1 | S protein [Hepatitis B virus] | 84 | 4e-16 |
| gi 15077858 gb AAK83381.1 | S protein [Hepatitis B virus] >g... | 84 | 4e-16 |
| gi 18699334 gb AAL78533.1 | surface antigen [Hepatitis B virus] | 84 | 4e-16 |
| gi 329629 gb AAA45482.1 | surface antigen [Hepatitis B virus] | 84 | 4e-16 |
| gi 30983609 gb AAP40737.1 | large S protein [Hepatitis B virus] | 84 | 4e-16 |
| gi 6537707 gb AAF15705.1 | surface antigen [Hepatitis B virus] | 84 | 4e-16 |
| gi 484566 pir JQ2058 | surface antigen - hepatitis B virus (...) | 84 | 4e-16 |
| gi 30026438 gb AAP06634.1 | S protein [Hepatitis B virus] | 84 | 4e-16 |
| gi 11321150 gb AAG34074.1 | carrier-surface protein [Hepatit... | 84 | 4e-16 |
| gi 18699350 gb AAL78541.1 | surface antigen [Hepatitis B virus] | 84 | 4e-16 |
| gi 8894942 gb AAF80665.1 | HBsAg [Hepatitis B virus] | 84 | 4e-16 |
| gi 4105295 gb AAD02347.1 | surface antigen [Hepatitis B virus] | 84 | 4e-16 |
| gi 30983660 gb AAP40781.1 | large S protein [Hepatitis B virus] | 84 | 4e-16 |
| gi 3335604 gb AAD13366.1 | surface antigen [Hepatitis B virus] | 84 | 4e-16 |
| gi 30026445 gb AAP06640.1 | S protein [Hepatitis B virus] | 84 | 4e-16 |
| gi 1359697 emb CAA66436.1 | pre-S2 protein [Hepatitis B virus] | 84 | 4e-16 |
| gi 6175438 gb AAF05014.1 | HBsAg [Hepatitis B virus] >gi 617... | 84 | 4e-16 |
| gi 6175444 gb AAF05018.1 | HBsAg [Hepatitis B virus] | 84 | 4e-16 |
| gi 30026385 gb AAP06588.1 | large S protein [Hepatitis B virus] | 84 | 4e-16 |
| gi 11321136 gb AAG34067.1 | carrier-surface protein [Hepatit... | 84 | 4e-16 |
| gi 30026330 gb AAP06541.1 | middle S protein [Hepatitis B vi... | 84 | 4e-16 |
| gi 6692569 gb AAF24737.1 | S protein [Hepatitis B virus] | 84 | 4e-16 |
| gi 6692527 gb AAF24695.1 | middle S protein [Hepatitis B virus] | 84 | 4e-16 |
| gi 30026444 gb AAP06639.1 | middle S protein [Hepatitis B vi... | 84 | 4e-16 |
| gi 10644463 gb AAG21296.1 | surface antigen [Hepatitis B virus] | 84 | 4e-16 |
| gi 6692560 gb AAF24728.1 | large S protein [Hepatitis B virus] | 84 | 4e-16 |
| gi 30026387 gb AAP06590.1 | S protein [Hepatitis B virus] | 84 | 4e-16 |
| gi 6537619 gb AAF15617.1 | surface antigen [Hepatitis B viru... | 84 | 4e-16 |
| gi 3128457 gb AAC62942.1 | small surface antigen [Hepatitis ...] | 84 | 4e-16 |
| gi 41059688 gb AAR99339.1 | middle S protein [Hepatitis B vi... | 84 | 4e-16 |
| gi 11321140 gb AAG34069.1 | carrier-surface protein [Hepatit... | 84 | 4e-16 |
| gi 41059686 gb AAR99337.1 | Pre-S/S protein [Hepatitis B virus] | 84 | 4e-16 |
| gi 29124920 gb AAO63541.1 | envelope protein [Hepatitis B vi... | 84 | 4e-16 |
| gi 6692528 gb AAF24696.1 | S protein [Hepatitis B virus] | 84 | 4e-16 |
| gi 30026329 gb AAP06540.1 | large S protein [Hepatitis B virus] | 84 | 4e-16 |
| gi 6692526 gb AAF24694.1 | large S protein [Hepatitis B virus] | 84 | 4e-16 |
| gi 30983616 gb AAP40743.1 | middle S protein [Hepatitis B vi... | 84 | 4e-16 |
| gi 29124924 gb AAO63543.1 | envelope protein [Hepatitis B vi... | 84 | 4e-16 |
| gi 32346306 gb AAO41333.1 | preS1/preS2 surface protein [Hep... | 84 | 4e-16 |
| gi 18699471 gb AAL78601.1 | surface antigen [Hepatitis B virus] | 84 | 4e-16 |
| gi 32346290 gb AAO41321.1 | preS1/preS2 surface protein [Hep... | 84 | 4e-16 |
| gi 18699388 gb AAL78560.1 | surface antigen [Hepatitis B vir... | 84 | 4e-16 |
| gi 6692561 gb AAF24729.1 | middle S protein [Hepatitis B vir... | 84 | 4e-16 |
| gi 1359691 emb CAA66437.1 | S protein [Hepatitis B virus] | 84 | 4e-16 |
| gi 6692520 gb AAF24688.1 | middle S protein [Hepatitis B vir... | 84 | 4e-16 |
| gi 30983615 gb AAP40742.1 | large S protein [Hepatitis B virus] | 84 | 4e-16 |
| gi 1359696 emb CAA66435.1 | pre-S1 protein [Hepatitis B virus] | 84 | 4e-16 |
| gi 32346270 gb AAO41306.1 | preS1/preS2 surface protein [Hep... | 84 | 4e-16 |

| | | | |
|--------------------------------|--------------------------------------|----|-------|
| gi 29124928 gb AAO63546.1 | envelope protein [Hepatitis B vi... | 84 | 4e-16 |
| gi 30026437 gb AAP06633.1 | middle S protein [Hepatitis B vi... | 84 | 4e-16 |
| gi 11321128 gb AAG34063.1 | carrier-surface protein [Hepatit... | 84 | 4e-16 |
| gi 30026436 gb AAP06632.1 | large S protein [Hepatitis B virus] | 84 | 4e-16 |
| gi 32346255 gb AAO41295.1 | preS1/preS2 surface protein [Hep... | 84 | 4e-16 |
| gi 18699336 gb AAL78534.1 | surface antigen [Hepatitis B virus] | 84 | 4e-16 |
| gi 32346286 gb AAO41318.1 | preS1/preS2 surface protein [Hep... | 84 | 4e-16 |
| gi 30983612 gb AAP40739.1 | S protein [Hepatitis B virus] | 84 | 4e-16 |
| gi 138793 sp P17397 VMSA_HPBVI | MAJOR SURFACE ANTIGEN PRECUR... | 84 | 4e-16 |
| gi 30983657 gb AAP40778.1 | S protein [Hepatitis B virus] | 84 | 4e-16 |
| gi 18699390 gb AAL78561.1 | surface antigen [Hepatitis B virus] | 84 | 4e-16 |
| gi 9454474 gb AAF87834.1 | preS1/preS2/S envelope protein [H... | 84 | 4e-16 |
| gi 11321110 gb AAG34054.1 | carrier-surface protein [Hepatit... | 84 | 4e-16 |
| gi 29124912 gb AAO63536.1 | envelope protein [Hepatitis B vi... | 84 | 4e-16 |
| gi 6537686 gb AAF15684.1 | surface antigen [Hepatitis B virus] | 84 | 4e-16 |
| gi 30026342 gb AAP06551.1 | large S protein [Hepatitis B virus] | 84 | 4e-16 |
| gi 138796 sp P17399 VMSA_HPBVO | MAJOR SURFACE ANTIGEN PRECUR... | 84 | 4e-16 |

Alignments

Get selected sequences

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☐ >gi|6537688|gb|AAF15686.1| surface antigen [Hepatitis B virus]
Length = 63

Score = 90.6 bits (206), Expect = 3e-18
Identities = 26/26 (100%), Positives = 26/26 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTDRN 26
CKTCTTPAQGTSMFPSCCCTKPTDRN
Sbjct: 8 CKTCTTPAQGTSMFPSCCCTKPTDRN 33

☐ >gi|28412176|gb|AAO40321.1| surface antigen [Hepatitis B virus]
Length = 42

Score = 86.7 bits (197), Expect = 5e-17
Identities = 25/26 (96%), Positives = 25/26 (96%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTDRN 26
CKTCTTPAQG SMFPSCCCTKPTDRN
Sbjct: 8 CKTCTTPAQGNSMFPSCCCTKPTDRN 33

☐ >gi|4884874|gb|AAD31851.1| surface antigen [Hepatitis B virus]
Length = 226

Score = 86.7 bits (197), Expect = 5e-17
Identities = 25/26 (96%), Positives = 25/26 (96%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTDRN 26
CKTCTTPAQG SMFPSCCCTKPTDRN
Sbjct: 121 CKTCTTPAQGNSMFPSCCCTKPTDRN 146

☐ >gi|30026416|gb|AAP06615.1| S protein [Hepatitis B virus]
Length = 226

Score = 84.2 bits (191), Expect = 3e-16
Identities = 25/26 (96%), Positives = 25/26 (96%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTDRN 26
CKTCTTPAQGTSMFPSCCCTKPTD N
Sbjct: 121 CKTCTTPAQGTSMFPSCCCTKPTDAN 146

☐ >gi|1359704|emb|CAA66446.1| pre-S2 protein [Hepatitis B virus]
Length = 281

Score = 83.8 bits (190), Expect = 4e-16
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24
CKTCTTPAQGTSMFPSCCCTKPTD
Sbjct: 176 CKTCTTPAQGTSMFPSCCCTKPTD 199

☐ >gi|30026343|gb|AAP06552.1| middle S protein [Hepatitis B virus]
Length = 281

Score = 83.8 bits (190), Expect = 4e-16
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24
CKTCTTPAQGTSMFPSCCCTKPTD
Sbjct: 176 CKTCTTPAQGTSMFPSCCCTKPTD 199

☐ >gi|30983650|gb|AAP40772.1| large S protein [Hepatitis B virus]
Length = 400

Score = 83.8 bits (190), Expect = 4e-16
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24
CKTCTTPAQGTSMFPSCCCTKPTD
Sbjct: 295 CKTCTTPAQGTSMFPSCCCTKPTD 318

☐ >gi|6692573|gb|AAF24741.1| large S protein [Hepatitis B virus]
Length = 400

Score = 83.8 bits (190), Expect = 4e-16
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24
CKTCTTPAQGTSMFPSCCCTKPTD

Sbjct: 295 CKTCTTPAQGTSMFPSCCCTKPTD 318

☐ >[gi|18699356|gb|AAL78544.1|](#) surface antigen [Hepatitis B virus]
Length = 128

Score = 83.8 bits (190), Expect = 4e-16
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24
CKTCTTPAQGTSMFPSCCCTKPTD
Sbjct: 100 CKTCTTPAQGTSMFPSCCCTKPTD 123

☐ >[gi|29124910|gb|AAO63535.1|](#) envelope protein [Hepatitis B virus]
Length = 226

Score = 83.8 bits (190), Expect = 4e-16
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24
CKTCTTPAQGTSMFPSCCCTKPTD
Sbjct: 121 CKTCTTPAQGTSMFPSCCCTKPTD 144

☐ >[gi|30983652|gb|AAP40774.1|](#) S protein [Hepatitis B virus]
Length = 226

Score = 83.8 bits (190), Expect = 4e-16
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24
CKTCTTPAQGTSMFPSCCCTKPTD
Sbjct: 121 CKTCTTPAQGTSMFPSCCCTKPTD 144

☐ >[gi|27261547|gb|AAN85922.1|](#) surface antigen [Hepatitis B virus]
[gi|27261587|gb|AAN85929.1|](#) surface antigen [Hepatitis B virus]
Length = 400

Score = 83.8 bits (190), Expect = 4e-16
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24
CKTCTTPAQGTSMFPSCCCTKPTD
Sbjct: 295 CKTCTTPAQGTSMFPSCCCTKPTD 318

☐ >[gi|6692574|gb|AAF24742.1|](#) middle S protein [Hepatitis B virus]
Length = 281

Score = 83.8 bits (190), Expect = 4e-16
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24
CKTCTTPAQGTSMFPSCCCTKPTD
Sbjct: 176 CKTCTTPAQGTSMFPSCCCTKPTD 199

☐ >[gi|6692567|gb|AAF24735.1|](#) large S protein [Hepatitis B virus]
Length = 400

Score = 83.8 bits (190), Expect = 4e-16
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24
CKTCTTPAQGTSMFPSCCCTKPTD
Sbjct: 295 CKTCTTPAQGTSMFPSCCCTKPTD 318

☐ >[gi|37674548|gb|AAQ96928.1|](#) S protein [Hepatitis B virus]
Length = 113

Score = 83.8 bits (190), Expect = 4e-16
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24
CKTCTTPAQGTSMFPSCCCTKPTD
Sbjct: 72 CKTCTTPAQGTSMFPSCCCTKPTD 95

☐ >[gi|6537851|gb|AAF15849.1|](#) surface antigen [Hepatitis B virus]
[gi|6537852|gb|AAF15850.1|](#) surface antigen [Hepatitis B virus]
[gi|6537853|gb|AAF15851.1|](#) surface antigen [Hepatitis B virus]
Length = 63

Score = 83.8 bits (190), Expect = 4e-16
Identities = 24/26 (92%), Positives = 25/26 (96%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTDRN 26
CKTCT PAQGTSMFPSCCCTKP+DRN
Sbjct: 8 CKTCTIPAQGTSMFPSCCCTKPSDRN 33

☐ >[gi|30983661|gb|AAP40782.1|](#) middle S protein [Hepatitis B virus]
Length = 281

Score = 83.8 bits (190), Expect = 4e-16
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24
CKTCTTPAQGTSMFPSCCCTKPTD
Sbjct: 176 CKTCTTPAQGTSMFPSCCCTKPTD 199

☐ >[gi|30026443|gb|AAP06638.1|](#) large S protein [Hepatitis B virus]

Length = 400

Score = 83.8 bits (190), Expect = 4e-16
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24
CKTCTTPAQGTSMFPSCCCTKPTD
Sbjct: 295 CKTCTTPAQGTSMFPSCCCTKPTD 318

☐ >[gi|19224215|gb|AAL86446.1|](#) large S protein [Hepatitis B virus]
Length = 400

Score = 83.8 bits (190), Expect = 4e-16
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24
CKTCTTPAQGTSMFPSCCCTKPTD
Sbjct: 295 CKTCTTPAQGTSMFPSCCCTKPTD 318

☐ >[gi|30026386|gb|AAP06589.1|](#) middle S protein [Hepatitis B virus]
Length = 281

Score = 83.8 bits (190), Expect = 4e-16
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24
CKTCTTPAQGTSMFPSCCCTKPTD
Sbjct: 176 CKTCTTPAQGTSMFPSCCCTKPTD 199

☐ >[gi|18699348|gb|AAL78540.1|](#) surface antigen [Hepatitis B virus]
Length = 128

Score = 83.8 bits (190), Expect = 4e-16
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24
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Sbjct: 100 CKTCTTPAQGTSMFPSCCCTKPTD 123

☐ >[gi|18699467|gb|AAL78599.1|](#) surface antigen [Hepatitis B virus]
Length = 128

Score = 83.8 bits (190), Expect = 4e-16
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24
CKTCTTPAQGTSMFPSCCCTKPTD
Sbjct: 100 CKTCTTPAQGTSMFPSCCCTKPTD 123

□ >gi|30983606|gb|AAP40734.1| S protein [Hepatitis B virus]
Length = 226

Score = 83.8 bits (190), Expect = 4e-16
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24
CKTCTTPAQGTSMFPSCCCTKPTD
Sbjct: 121 CKTCTTPAQGTSMFPSCCCTKPTD 144

□ >gi|38147025|gb|AAP44480.1| large S protein [Hepatitis B virus]
Length = 400

Score = 83.8 bits (190), Expect = 4e-16
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24
CKTCTTPAQGTSMFPSCCCTKPTD
Sbjct: 295 CKTCTTPAQGTSMFPSCCCTKPTD 318

□ >gi|11321156|gb|AAG34077.1| carrier-surface protein [Hepatitis B virus]
Length = 128

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Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24
CKTCTTPAQGTSMFPSCCCTKPTD
Sbjct: 100 CKTCTTPAQGTSMFPSCCCTKPTD 123

□ >gi|32346298|gb|AAO41327.1| preS1/preS2 surface protein [Hepatitis B virus]
Length = 400

Score = 83.8 bits (190), Expect = 4e-16
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24
CKTCTTPAQGTSMFPSCCCTKPTD
Sbjct: 295 CKTCTTPAQGTSMFPSCCCTKPTD 318

□ >gi|6692575|gb|AAF24743.1| S protein [Hepatitis B virus]
Length = 226

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Identities = 24/24 (100%), Positives = 24/24 (100%)

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Sbjct: 121 CKTCTTPAQGTSMFPSCCCTKPTD 144

☐ >gi|30983651|gb|AAP40773.1| middle S protein [Hepatitis B virus]
Length = 281

Score = 83.8 bits (190), Expect = 4e-16
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24
CKTCTTPAQGTSMFPSCCCTKPTD
Sbjct: 176 CKTCTTPAQGTSMFPSCCCTKPTD 199

☐ >gi|6537882|gb|AAF15880.1| surface antigen [Hepatitis B virus]
Length = 63

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Identities = 24/26 (92%), Positives = 25/26 (96%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTDRN 26
CKTCT PAQGTSMFPSCCCTKP+DRN
Sbjct: 8 CKTCTIPAQGTSMFPSCCCTKPSDRN 33

☐ >gi|18699469|gb|AAL78600.1| surface antigen [Hepatitis B virus]
Length = 128

Score = 83.8 bits (190), Expect = 4e-16
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24
CKTCTTPAQGTSMFPSCCCTKPTD
Sbjct: 100 CKTCTTPAQGTSMFPSCCCTKPTD 123

☐ >gi|30026331|gb|AAP06542.1| S protein [Hepatitis B virus]
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Score = 83.8 bits (190), Expect = 4e-16
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24
CKTCTTPAQGTSMFPSCCCTKPTD
Sbjct: 121 CKTCTTPAQGTSMFPSCCCTKPTD 144

☐ >gi|32346302|gb|AAO41330.1| preS1/preS2 surface protein [Hepatitis B virus]
Length = 400

Score = 83.8 bits (190), Expect = 4e-16
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24
CKTCTTPAQGTSMFPSCCCTKPTD

Sbjct: 295 CKTCTTPAQGTSMFSPSCCCTKPTD 318

☐ >[gi|6537691|gb|AAF15689.1|](#) surface antigen [Hepatitis B virus]
Length = 63

Score = 83.8 bits (190), Expect = 4e-16
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFSPSCCCTKPTD 24

CKTCTTPAQGTSMFSPSCCCTKPTD

Sbjct: 8 CKTCTTPAQGTSMFSPSCCCTKPTD 31

☐ >[gi|1359703|emb|CAA66445.1|](#) pre-S1 protein [Hepatitis B virus]
[gi|9454479|gb|AAF87838.1|](#) preS1/preS2/S envelope protein [Hepatitis B virus]
Length = 400

Score = 83.8 bits (190), Expect = 4e-16
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFSPSCCCTKPTD 24

CKTCTTPAQGTSMFSPSCCCTKPTD

Sbjct: 295 CKTCTTPAQGTSMFSPSCCCTKPTD 318

☐ >[gi|37674636|gb|AAQ96972.1|](#) S protein [Hepatitis B virus]
Length = 113

Score = 83.8 bits (190), Expect = 4e-16
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFSPSCCCTKPTD 24

CKTCTTPAQGTSMFSPSCCCTKPTD

Sbjct: 72 CKTCTTPAQGTSMFSPSCCCTKPTD 95

☐ >[gi|37674638|gb|AAQ96973.1|](#) S protein [Hepatitis B virus]
Length = 113

Score = 83.8 bits (190), Expect = 4e-16
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFSPSCCCTKPTD 24

CKTCTTPAQGTSMFSPSCCCTKPTD

Sbjct: 72 CKTCTTPAQGTSMFSPSCCCTKPTD 95

☐ >[gi|15077858|gb|AAK83381.1|](#) S protein [Hepatitis B virus]
[gi|30026344|gb|AAP06553.1|](#) S protein [Hepatitis B virus]
Length = 226

Score = 83.8 bits (190), Expect = 4e-16

Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24
CKTCTTPAQGTSMFPSCCCTKPTD
Sbjct: 121 CKTCTTPAQGTSMFPSCCCTKPTD 144

☐ >[gi|18699334|gb|AAL78533.1|](#) surface antigen [Hepatitis B virus]
Length = 128

Score = 83.8 bits (190), Expect = 4e-16
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24
CKTCTTPAQGTSMFPSCCCTKPTD
Sbjct: 100 CKTCTTPAQGTSMFPSCCCTKPTD 123

☐ >[gi|329629|gb|AAA45482.1|](#) surface antigen [Hepatitis B virus]
Length = 281

Score = 83.8 bits (190), Expect = 4e-16
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24
CKTCTTPAQGTSMFPSCCCTKPTD
Sbjct: 176 CKTCTTPAQGTSMFPSCCCTKPTD 199

☐ >[gi|30983609|gb|AAP40737.1|](#) large S protein [Hepatitis B virus]
Length = 400

Score = 83.8 bits (190), Expect = 4e-16
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24
CKTCTTPAQGTSMFPSCCCTKPTD
Sbjct: 295 CKTCTTPAQGTSMFPSCCCTKPTD 318

☐ >[gi|6537707|gb|AAF15705.1|](#) surface antigen [Hepatitis B virus]
Length = 63

Score = 83.8 bits (190), Expect = 4e-16
Identities = 24/26 (92%), Positives = 25/26 (96%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTDRN 26
CKTCT PAQGTSMFPSCCCTKP+DRN
Sbjct: 8 CKTCTIPAQGTSMFPSCCCTKPSDRN 33

☐ >[gi|484566|pir||JQ2058](#) surface antigen - hepatitis B virus (subtype adw2, strain
[gi|1359699|emb|CAA66441.1|](#) S protein [Hepatitis B virus]

Length = 226

Score = 83.8 bits (190), Expect = 4e-16

Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24
CKTCTTPAQGTSMFPSCCCTKPTD
Sbjct: 121 CKTCTTPAQGTSMFPSCCCTKPTD 144

☐ >[gi|30026438|gb|AAP06634.1|](#) S protein [Hepatitis B virus]
Length = 226

Score = 83.8 bits (190), Expect = 4e-16

Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24
CKTCTTPAQGTSMFPSCCCTKPTD
Sbjct: 121 CKTCTTPAQGTSMFPSCCCTKPTD 144

☐ >[gi|11321150|gb|AAG34074.1|](#) carrier-surface protein [Hepatitis B virus]
Length = 128

Score = 83.8 bits (190), Expect = 4e-16

Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24
CKTCTTPAQGTSMFPSCCCTKPTD
Sbjct: 100 CKTCTTPAQGTSMFPSCCCTKPTD 123

☐ >[gi|18699350|gb|AAL78541.1|](#) surface antigen [Hepatitis B virus]
Length = 128

Score = 83.8 bits (190), Expect = 4e-16

Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24
CKTCTTPAQGTSMFPSCCCTKPTD
Sbjct: 100 CKTCTTPAQGTSMFPSCCCTKPTD 123

☐ >[gi|8894942|gb|AAF80665.1|](#) HBsAg [Hepatitis B virus]
Length = 98

Score = 83.8 bits (190), Expect = 4e-16

Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24
CKTCTTPAQGTSMFPSCCCTKPTD
Sbjct: 13 CKTCTTPAQGTSMFPSCCCTKPTD 36

☐ >[gi|4105295|gb|AAD02347.1|](#) surface antigen [Hepatitis B virus]
Length = 98

Score = 83.8 bits (190), Expect = 4e-16
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24
CKTCTTPAQGTSMFPSCCCTKPTD
Sbjct: 13 CKTCTTPAQGTSMFPSCCCTKPTD 36

☐ >[gi|30983660|gb|AAP40781.1|](#) large S protein [Hepatitis B virus]
Length = 400

Score = 83.8 bits (190), Expect = 4e-16
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24
CKTCTTPAQGTSMFPSCCCTKPTD
Sbjct: 295 CKTCTTPAQGTSMFPSCCCTKPTD 318

☐ >[gi|3335604|gb|AAD13366.1|](#) surface antigen [Hepatitis B virus]
Length = 61

Score = 83.8 bits (190), Expect = 4e-16
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24
CKTCTTPAQGTSMFPSCCCTKPTD
Sbjct: 12 CKTCTTPAQGTSMFPSCCCTKPTD 35

☐ >[gi|30026445|gb|AAP06640.1|](#) S protein [Hepatitis B virus]
Length = 226

Score = 83.8 bits (190), Expect = 4e-16
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24
CKTCTTPAQGTSMFPSCCCTKPTD
Sbjct: 121 CKTCTTPAQGTSMFPSCCCTKPTD 144

Get selected sequences

Select all

Deselect all

Database: All non-redundant GenBank CDS
translations+PDB+SwissProt+PIR+PRF excluding environmental samples
Posted date: Jul 23, 2004 12:53 AM
Number of letters in database: 614,976,940
Number of sequences in database: 1,838,829

| Lambda | K | H |
|--------|-------|------|
| 0.359 | 0.280 | 2.04 |

Gapped

| Lambda | K | H |
|--------|-------|-------|
| 0.294 | 0.110 | 0.610 |

Matrix: PAM30

Gap Penalties: Existence: 9, Extension: 1

Number of Hits to DB: 9,363,602

Number of Sequences: 1838829

Number of extensions: 233017

Number of successful extensions: 2104

Number of sequences better than 20000.0: 2072

Number of HSP's better than 20000.0 without gapping: 2072

Number of HSP's successfully gapped in prelim test: 0

Number of HSP's that attempted gapping in prelim test: 0

Number of HSP's gapped (non-prelim): 2100

length of query: 26

length of database: 614,976,940

effective HSP length: 16

effective length of query: 10

effective length of database: 585,555,676

effective search space: 5855556760

effective search space used: 5855556760

T: 11

A: 40

X1: 14 (7.3 bits)

X2: 35 (14.8 bits)

X3: 58 (24.6 bits)

S1: 36 (20.5 bits)

S2: 36 (18.5 bits)